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(12) **ABSTRACT OF INVENTION**

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(54) **INERTIAL FILTER-SEPARATOR**

(57) Abstract:

FIELD: removal of dust-like particles from flow of gas in various branches of industry. SUBSTANCE: inlet of split flow is made in the form of tangential branch pipe. Space of hopper-dust collector has spiral passage of rectangular section formed by row of plates with cylindrical surfaces mounted along generatrix of passage with curvature radius diminishing along flow so that edge of next plate is displaced to center of spiral forming dust-removing slot with edge of previous plate. Spiral passage has cross-

section diminishing downstream, dust-removing slots are made for control of their height which also diminishes downstream. Space of hopper-dust collector communicates with outlet turn of passage through hole in butt wall of passage placed in opposition along axis of spiral of outlet branch pipe, coaxially to it. Several discharge slots are arranged in first turn of spiral passage in addition. Outlet edge of last downstream plate is bevelled to axis of spiral. EFFECT: improved functional efficiency. 3 cl, 7 dwg

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